

ABSTRACT OF THE DISCLOSURENEUTRON ABSORBENT MATERIAL CONTAINING BORON CARBIDE AND
HAFNIUM, AND PROCESS FOR MANUFACTURING THIS MATERIAL.

The invention relates to a neutron absorbent material and to a process for manufacturing said material.

5 The neutron absorbent material of the invention is a material having great resistance to mechanical damage and more particularly great resistance to crack propagation.

This material contains boron carbide and hafnium in the form of powders of fine grain size.

10 With the manufacturing process it is possible, by reactive sintering of the two powders, to obtain a boron carbide based material having hafnium boride strata. It comprises a step consisting of mixing boron carbide and hafnium and a reactive sintering step of
15 the mixture obtained.